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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,700	02/13/2002	Stephen J. Mattingly	97012/07CIP	8082
23873	7590	10/20/2004	EXAMINER	
ROBERT W STROZIER, P.L.L.C PO BOX 429 BELLAIRE, TX 77402-0429				TATE, CHRISTOPHER ROBIN
ART UNIT		PAPER NUMBER		
		1654		

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/074,700	MATTINGLY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Christopher R. Tate	1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 September 2004.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 35,36,38-42,44-50 and 60-68 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) \_\_\_\_\_ is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) 35,36,38-42,44-50 and 60-68 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                          |                                                                             |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                         | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .                                              |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|                                                                                                                          | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 20, 2004 has been entered.

Claims 35, 36, 38-42, 44-50, and 60-68 are presented for examination on the merits.

### ***Claim Rejections - 35 USC § 112***

With respect to the biological deposit requirement set forth in the previous Office action, claims 35, 36, 38-42, 44-50, and 60-68 stand/are rejected under U.S.C. 112, first paragraph for the reasons set forth therein which are restated below.

The claimed invention is not deemed enabled without **complete evidence either that the claimed biological material (i.e., the particular demonstrated best mode *Rhodobacter capsulatus* strain shown in instant Examples 6 and 7) is known and readily available to the public or complete evidence of the deposit of the biological material.**

It is apparent that the demonstrated microorganism is required to practice the claimed invention. As a required element it/they must be known and readily available to the public or obtainable by a repeatable method set forth in the specification. If they are not so obtainable or available, the enablement requirements of 35 U.S.C. § 112, first paragraph, may be satisfied by a deposit of the microorganisms. See 37 C.F.R. § 1.802.

The specification does not provide a repeatable process for obtaining the demonstrated microorganism and it is not apparent if the microorganisms are readily available to the public. The specification must contain the date that the microorganism was deposited, the name of the microorganism and the address of where the microorganism were deposited.

If the deposit has been made under the terms of the Budapest Treaty, then an affidavit or declaration by Applicants or someone associated with the patent owner who is in a position to make such assurances, or a statement by an attorney or record over his/her signature, and registration number, stating that the specific strain(s) has/have been deposited under the Budapest Treaty and that all restrictions imposed by the depositor on the availability to the public of the deposited material will be irrevocably removed upon the granting of a patent, would satisfy the deposit requirements. See 37 C.F.R. § 1.808.

If the deposit has not been made under the Budapest Treaty, then in order to certify that the deposits meet the criteria set forth in 37 C.F.R. § 1.801-1.809, Applicant(s) may provide assurance of compliance by an affidavit or declaration, or by a statement by an Attorney of record over his/her signature and registration number, showing that:

- (a) during the pendency of this application, access to the invention will be afforded to the Commissioner upon request;
- (b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;
- c) the deposit(s) will be maintained in a public depository for a period of 30 years or 5 years after the last request or for the effective life of the patent, whichever is longer;

(d) a viability statement in accordance with the provisions of 37 C.F.R. § 1.807; and  
(e) the deposit will be replaced should it become necessary due to inviability,  
contamination or loss of capability to function in the manner described in the specification.

In addition, the identifying information set forth in 37 C.F.R. § 1.809 (d) should be added to the specification. See 37 C.F.R. § 1.803-1.809 for additional explanation of these requirements.

Applicants' state that they will submit a viable culture to a depository if allowable subject matter matures from this application. Accordingly, the above rejection stands until such biological deposit has actually been made.

***Claim Rejections - 35 U.S.C. § 102***

Claims 35, 38, 39, 41, 42, 44, 45, 48, and 50 stand rejected under 35 U.S.C. 102(b) as being anticipated by Jong et al. (KR 9411524 - DWPI Abstract), with evidence provided by the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992) for the reasons set forth in the previous Office action which are restated below.

Jong et al. teach a composition comprising *Rhodopseudomonas capsulatus* (which, as evidenced by the ATCC Catalogue, is now well known and recognized in the art as *Rhodobacter capsulatus* - i.e., *Rhodobacter capsulatus* was earlier known as *Rhodopseudomonas capsulatus*; however, *Rhodopseudomonas capsulatus* has since been renamed *Rhodobacter capsulatus* - see, e.g., pages 269 and 275 under the respective genus/species headings *Rhodobacter capsulatus* and *Rhodopseudomonas capsulatus*) as an active ingredient therein, whereby the composition further includes a carbohydrate and/or humus (please note that humus is dead plant material and, thus, would inherently contain cellulosic material therein since cellulosic material such as cellulose is defined as an "amorphous carbohydrate polymer ( $C_6H_{10}O_5$ ), the main constituent of all plant tissues and fibers" (Webster's Dictionary, 1988) - see DWPI Abstract. Please note that nothing

would preclude the additional ingredient(s) disclosed by the cited reference from being used as "insect food".

Therefore, the reference is deemed to anticipate the instant claims above.

Claims 35, 38, 39, 41, 42, 44, 45, 48, and 50 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi (JP 05247378 - CAPLUS Abstract), with evidence provided by the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992) for the reasons set forth in the previous Office action which are restated below.

Kobayashi teaches a composition comprising *Rhodopseudomonas capsulatus* (which, as evidenced by the ATCC Catalogue, is now well known and recognized in the art as *Rhodobacter capsulatus* - i.e., *Rhodobacter capsulatus* was earlier known as *Rhodopseudomonas capsulatus*; however, *Rhodopseudomonas capsulatus* has since been renamed *Rhodobacter capsulatus* - see, e.g., pages 269 and 275 under the respective genus/species headings *Rhodobacter capsulatus* and *Rhodopseudomonas capsulatus*) as an active ingredient therein, whereby the composition further includes cellulose (a carbohydrate polymer) - see CAPLUS Abstract. Please note that nothing would preclude the additional ingredient(s) disclosed by the cited reference from being used as "insect food".

Therefore, the reference is deemed to anticipate the instant claims above.

Claims 35, 38, 39, 41, 42, 44, 45, 48, and 50 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nippon Life KK (JP 60027672 - DWPI Abstract), with evidence provided by the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992) for the reasons set forth in the previous Office action which are restated below.

Nippon Life KK teaches a composition comprising *Rhodopseudomonas capsulatus* (which, as evidenced by the ATCC Catalogue, is now well known and recognized in the art as

*Rhodobacter capsulatus* - i.e., *Rhodobacter capsulatus* was earlier known as *Rhodopseudomonas capsulatus*; however, *Rhodopseudomonas capsulatus* has since been renamed *Rhodobacter capsulatus* - see, e.g., pages 269 and 275 under the respective genus/species headings *Rhodobacter capsulatus* and *Rhodopseudomonas capsulatus*) as an active ingredient therein, whereby the composition further includes various carbohydrate-containing ingredients including rice bran which would inherently comprise cellulostic material (e.g., cellulose - a carbohydrate polymer) - see DWPI Abstract. Please note that nothing would preclude the additional ingredient(s) disclosed by the cited reference from being used as "insect food".

Therefore, the reference is deemed to anticipate the instant claims above.

Claims 35, 36, 38, 39, 41, 42, 44-48, and 50 stand rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda (JP 05304959 - JPAB Abstract), with evidence provided by the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992) for the reasons set forth in the previous Office action which are restated below.

Matsuda teaches a composition comprising *Rhodopseudomonas capsulatus* (which, as evidenced by the ATCC Catalogue, is now well known and recognized in the art as *Rhodobacter capsulatus* - i.e., *Rhodobacter capsulatus* was earlier known as *Rhodopseudomonas capsulatus*; however, *Rhodopseudomonas capsulatus* has since been renamed *Rhodobacter capsulatus* - see, e.g., pages 269 and 275 under the respective genus/species headings *Rhodobacter capsulatus* and *Rhodopseudomonas capsulatus*) in an amount of  $10^6$ - $10^{10}$ /g as an active ingredient therein, whereby the composition further comprises a bacterial culture solution (which would inherently contain at least one carbohydrate therein) - see JPAB Abstract. Please note that nothing would preclude the additional ingredient(s) disclosed by the cited reference from being used as "insect food".

Therefore, the reference is deemed to anticipate the instant claims above..

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Claims 35, 38, 39, 41, 42, 44, 45, 48, and 50 stand rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. (JP 09238681 - JPAB Abstract), with evidence provided by the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992) for the reasons set forth in the previous Office action which are restated below.

Kobayashi et al. teach a composition comprising *Rhodopseudomonas capsulatus* (which, as evidenced by the ATCC Catalogue, is now well known and recognized in the art as *Rhodobacter capsulatus* - i.e., *Rhodobacter capsulatus* was earlier known as *Rhodopseudomonas capsulatus*; however, *Rhodopseudomonas capsulatus* has since been renamed *Rhodobacter capsulatus* - see, e.g., pages 269 and 275 under the respective genus/species headings *Rhodobacter capsulatus* and *Rhodopseudomonas capsulatus*) as an active ingredient therein, whereby the composition further a seaweed polysaccharide (carbohydrate) - see JPAB Abstract. Please note that nothing would preclude the additional ingredient(s) disclosed by the cited reference from being used as "insect food".

Therefore, the reference is deemed to anticipate the instant claims above.

Claims 35, 36, 38, 39, 41, 42, 44-48, and 50 stand rejected under 35 U.S.C. 102(b) as being anticipated by the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992) for the reasons set forth in the previous Office action which are restated below.

The ATCC Catalogue teaches compositions comprising pure cultures (thus, apparently within the claimed amount ranges) of *Rhodopseudomonas capsulatus* (which, as evidenced by the ATCC Catalogue, is now well known and recognized in the art as *Rhodobacter capsulatus* - i.e., *Rhodobacter capsulatus* was earlier known as *Rhodopseudomonas capsulatus*; however, *Rhodopseudomonas capsulatus* has since been renamed *Rhodobacter capsulatus* - see, e.g., pages 269 and 275 under the respective genus/species headings *Rhodobacter capsulatus* and

*Rhodopseudomonas capsulatus*), whereby the composition further comprises a concentrated growth medium (which would inherently contain at least one carbohydrate therein) as well as double strength skim milk (which also inherently contains carbohydrates therein such as lactose) - see, e.g., pages vi, 269, 275, 542 and 543 . Please note that nothing would preclude the additional ingredient(s) disclosed by the cited reference from being used as "insect food".

Therefore, the reference is deemed to anticipate the instant claims above.

***Claim Rejections - 35 U.S.C. § 103***

Claims 35, 36, 38, 39, 41, 42, 44-48, and 50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Jong et al. (KR 9411524 - DWPI Abstract), Kobayashi (JP 05247378 - CAPLUS Abstract), Nippon Life KK (JP 60027672 - DWPI Abstract), Matsuda (JP 05304959 - JPAB Abstract), or Kobayashi et al. (JP 09238681 - JPAB Abstract), with evidence provided by the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992); or over the ATCC Catalogue of Bacteria and Bacteriophages (18th ed., 1992) for the reasons set forth in the previous Office action which are restated below.

The references are relied upon for the reasons set forth above.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to prepare a composition (such as any one of those disclosed by the cited references) comprising a result-effective amount of *Rhodobacter capsulatus* (*Rhodopseudomonas capsulatus*), especially since each of the cited references beneficially teach that this bacterial species is an active ingredient (and/or pure culture) therein. Accordingly, the adjustment of this particular conventional working conditions as well as other conventional working conditions (e.g., further including and/or substituting a commonly-employed, readily-

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available cellulostic carbohydrate source within such compositions), is deemed merely a matter of judicious selection and routine optimization which is well within the purview of the skilled artisan.

Thus, the invention as a whole is *prima facie* obvious over one or more of the cited references, especially in the absence of evidence to the contrary.

Applicants' arguments concerning the above art rejections have been carefully considered but are not deemed to be persuasive of error in the rejections. Applicants argue that the art references do not teach an insecticidal amount of Rhodobacter capsulatus bacteria and/or the use of such compositions as claimed - i.e., for controlling particular insect populations. However, the reference compositions would inherently be in amounts which would provide the claimed insecticidal effect. In addition, as discussed in the previous Office action, with respect to the U.S.C. 102 and 103 rejections above, it is noted that the cited references do not teach that the composition can be used in the manner instantly claimed - however, the intended use of the claimed composition does not patentably distinguish the composition, *per se*, since such undisclosed use is inherent in the reference compositions. In order to be limiting, the intended use must create a structural difference between the claimed composition and the prior art compositions. In the instant case, the intended use does not create a structural difference, thus the intended use is not limiting. Please note that when applicant claims a composition in terms of function and the composition of the prior art appears to be the same, the Examiner may make a rejection under both 35 U.S.C. 102 and 103 (MPEP 2112). Applicants further argue that the cited references do not teach an insect food, as instantly disclosed. However, as discussed

above, the ingredients disclosed by the cited references (including carbohydrates, etc.) would be suitable for ingestion by insects and, thus, read upon "insect food" - i.e., nothing would preclude the additional ingredient(s) disclosed by the cited references from being used as "insect food". Further, in response to Applicants' argument that the references fail to show certain features of Applicant's invention, it is noted that the features upon which applicant relies (i.e., a composition including an insect food, separate from the culture medium) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claims 40, 49, and 60-68 are free of the art. The prior art of record does not teach or reasonably suggest a composition for controlling or eliminating the recited insect populations comprising an insecticidal effective amount of *Rhodobacter capsulatus* bacteria and an insect food, whereby the insect food comprises at least 60 wt. % carbohydrate (as well as having/providing the other recited limitations) instantly claimed in claims 40, 49, and 60-68.

### **Conclusion**

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Tate whose telephone number is (571) 272-0970. The examiner can normally be reached on Mon-Thur, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on (571) 272-0974. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher R. Tate  
Primary Examiner  
Art Unit 1654